U.S. Army SMDC
Space and Missile Defense Command

# The Eagle

Volume 6, Number 10 Published in the interest of the U.S. Army Space and Missile Defense Command November 1999

## *Follow your dreams…*

**Army Astronaut, Maj. Doug Wheelock, took time during October's AUSA annual meeting to visit with children at Martha's Table in Washington, D.C. Wheelock is an '83 graduate of West Point, with his master's degree in aerospace engineering from Georgia Institute of Technology. He became an astronaut candidate August '98.**


(Photo by LuAnne Fantasia)

# *The battlefield of business*

## *APIC is the map to high performance*

**by LuAnne Fantasia**
**Huntsville, Ala.**

Take a poll among co-workers and see how many would prefer to be considered a high flier instead of a dull performer.

"Your leadership is headed toward high performance," said Dan Cleary, in a recent presentation on the Army Performance Improvement Criteria. "APIC *is not* just the flavor-of-the-month. It *is* already embedded across the Army," Cleary said.

Cleary is the retired Army colonel recalled to active duty by the Army Chief of Staff a few years ago to take the world reknown Malcom Baldrige criteria for performance excellence, and rework them into a *green* offspring for the Army, now known as APIC.

"We're very good on the battlefield, ladies and gentlemen, but when we step off the battlefield, we're in trouble," because we're not good managers off the battlefield, Cleary told the large Huntsville group.

And because 93 percent of Congress--the decision-makers for the military--is lawyers and businessmen who have never been in uniform, they are management-oriented, and this command needs to be management oriented. Even from military organizations, they want to know, "what is your management system?"

So currently, those decision-makers have placed 40,000 soldier slots on the line, according to Cleary, and as those soldier slots are pulled from fixed units back into deployable units, there will be more jobs contracted out, or privatized. "On the battlefield, you never let go of your enemy. In your organization, is privatization your enemy? You better believe it! Only high-performance organizations stay solvent," Cleary said.

### Change is the only constant

"Change is the norm, not an option," he added. "There *can* be change without improvement, but there *cannot* be improvement without change. APIC is the framework to manage that change, and SMDC has to fit into that framework…not vice versa!"

The Baldrige criteria—from which APIC was taken—is a collection of the best business practices, an international standard of excellence, Cleary said, and it changes every year, "because, if you have an environment where change is the norm, how can you have a static management plan?"

Although APIC does not focus on any specific management system, it is based upon the same underlying principle of any management plan—customer requirements. "Everything a high-performance organization does is focused on customer requirement," Cleary said.

"Leadership, planning, process management, human resources and business results—everything circles back around to mission accomplishment or customer satisfaction. If you know HOW your customers want their product or service, you can predict customer satisfaction."

An equally important piece of a management plan is the process flow chart, or map, where the customer satisfaction process is under control, repeatable and measurable, "otherwise it's just industrial tourism," Cleary said.

He said to change an organization's performance, change the way you measure it. "If I want to change your behavior, I change the way I measure you. And, in a high-performance organization, I have to measure you against the customer's expectations."

### Factoids by Cleary

—High-performance organizations deal in *future* operations, not current.
—Stakeholders [whether Congress, DoD decision-makers, private citizens] invest in high-performance organizations.
—If employees are not making decisions within 72 hours of coming on board, it is not a high-performance organization.
—APIC cannot protect an organization from greed and stupidity.
—Assessment is not *finger-pointing*.
—Feedback is the *breakfast of champions*.
—The greatest changes take place at the senior-management level.
—Insanity is doing what you've always done and expecting something to change.

Cleary said the question this command should ask itself is, "have we managed our command as a corporation or as six separate elements?"

"We are not organized," said Lt. Gen. John Costello, during another recent assembly in Huntsville.

"That's why we're working hard on the strategic planning process," the commanding general said.

"We have to plan goals on how we move as an organization, because the 'C' in SMDC does not stand for conglomerate," Costello added.

"We must invest the time in Covey training, Army Family Action Plan, and APIC, to become an organization."

Cleary said, "The essence of the battlefield is the training doctrine. The essence of the business battlefield is APIC--the Army Performance Improvement Criteria."

# Change one thing and it's just not the same

One of the command's anchors was pulled up and moved. Brig. Gen. Steven Flohr, SMDC's first deputy commanding general since it became a major Army command in September '97, is reassigned to commanding general, Army White Sands Missile Range, N.M. He reported there this month.

As part of the bedrock of SMDC as a new major Army command, the deputy commanding general was also director of the Space and Missile Defense Acquisition Center. Flohr came to SMDC from the Redstone Arsenal, Ala., where he served as project manager, Multiple Launch Rocket System in the Program Executive Office, Tactical Missiles.

Photo by Steven Gover

**Brig. Gen. Steven Flohr is now Commanding General, Army White Sands Missile Range, N.M.**

**Q: As our first deputy commanding general as a major Army command, what are your thoughts on some of our milestones since September '97?**

*Flohr:* We've made great progress since October '97. We have successfully made some organizational changes, even though those types of changes are difficult to accept and embrace. We have implemented the Strategic Planning and Analysis staff element and, as a result, the SMDC Strategic Plan was developed and has now been implemented by the memo from the commanding general.

Other organizational changes included standing up our space and missile defense combat developer—the Force Development and Integration Center, and standing up the Acquisition Center as a consolidation of the Project Manager's and test range activities.

The Battle Lab made the transition from an integration center to a TRADOC-chartered organization and the Technical Center added Space Technology responsibilities.

. I absolutely believe we are on the right track with these organizational changes. We are a unique organization in the Army, because our business is very unique, with space and missile defense mission areas of increasing importance to the Army and our Nation in the future.

**Q: With the recent law change eliminating salary caps on retired military officers, the competition in civil service will increase. Any advice to the Acquisition Corps workforce and civilian employees in general, about professional development?**

*Flohr:* I assume that some military officers will seek civil service positions due to the recent change in the law, however, I'm not sure what the impact will be. Competition for senior grade civil service positions is very high anyway, due to the past reductions of the federal workforce. Competition will remain intense for promotions to the most senior positions.

I do have advice for the Acquisition Corps workforce: pay attention to continued professional development training requirements and professional development opportunities. It appears that the military members of the Army Acquisition Corps will continue to decline due to the increased emphasis on manning the MTOE Army, the Army Corps and Divisions. Therefore, we will depend on the civilian Acquisition Corps members to fill more of the critical Acquisition Positions and the Program/ Project/Product Manager positions.

In the recent General Officer Steering Committee review of the Project/ Product Manager positions, many more PM positions are now being coded for fill by the *Best Qualified* candidate, either military or civilian. So, for each military and civilian member to be competitive, you must show that you have completed the training, education, work experiences and skill qualifications necessary to succeed in these key materiel acquisition leadership positions.

**Q: In your parting comments to the people of SMDC, what do we do well?**

*Flohr:* We continue to excel in our core competencies: missile defense technologies, space and missile defense engineering and technical support, modeling and simulation activities, space systems operators, and streamlined acquisition processes. These core competencies are all brought together and highlighted in experiments, demonstrations, and tests such as the National Missile Defense Integrated Flight Test .
(*See related story, pages 6&7.)*

For NMD IFT-3:

—we provided the test range at Kwajalein Missile Range

—developed and launched the target from Vandenberg Air Force Base

—our Technical Center sensors such as the Airborne Surveillance Testbed (AST) and the HALO IRIS aircraft collected critical intercept data

—the Technical Center engineering staff served as the essential matrix support to the NMD program and project offices

—the Army Space Command Forward was on-site at Colorado Springs, as this mission was conducted in conjunction with the NORAD/ USSPACECOM battle management and command and control elements

—and the newly established NMD TRADOC Systems Manager provided the user representation and the combat developer functions in support of this test.

It was very gratifying to me to see the entire command come together to actually achieve a hit-to-kill intercept high above the Pacific.

**Q: What do we do not-so-well?**

*Flohr:* We must continue to pursue the synergy of the command. As I described above for the IFT-3 test, we must be well-coordinated internally and externally to actually capture the effort put forth on the programs that are common to multiple elements of the command. We attempt to accomplish this through the Command Program Reviews which have been conducted to varying degrees of success.

**Q: What can members of SMDC do to help you as commanding general at White Sands Missile Range?**

*Flohr:* Send good targets, continue to render excellent support to our customers in Air and Missile Defense, keep AST and HALO IRIS flying and available, implement the HELSTF Center of Excellence plans, and continue the directed energy efforts in the command.

Feel free to stop by and visit any time you're at White Sands.

*(Gerda Sherrill and LuAnne Fantasia contributed to this article.)*


***The Eagle ...***

is an unofficial publication authorized under the provisions of Army Regulation 360-81. is published by the U.S. Army Space and Missile Defense Command. Views and opinions expressed are not necessarily those of SMDC, Department of Defense, or Department of Army. Reader input is solicited and welcomed; however, no payment will be made for such contributions. Please direct letters and comments to:

U.S. Army Space and Missile Defense Command
ATTN: Editor, **The Eagle,** P.O. Box 1500,
Huntsville, AL 35807-3801
Phone (256)955-1641 or DSN 645-1641
FAX: DSN 645-1214

**Commanding General** ..... **Lt. Gen. John Costello**

**Chief, Public Affairs** ..... **William M. Congo**

**Editor** ..... **LuAnne Fantasia**

**Production** ..... **Sybil Baker**

**Major contributors:**

**Gerda Sherrill**
**Ed White**
**Melva Tillar**

# *Celebrating an* AWARD

**Calvin Schlafke was this year's site manager for JLENS at Roving Sands'99. Schlafke is a contractor with CAS, Inc. , Huntsville, Ala.**

**Sgt. 1st Class Connie E. Dickey**
**Army News Service**

WASHINGTON—Nov 3, 1999—*Popular Mechanics* magazine has chosen the Joint Land Attack Missile Elevated Netted Sensor System for a 2000 Design and Engineering Award.

"It was a complete surprise," Mike Grannan, deputy program manager for JLENS said. "It is a very impressive award from Popular Mechanics."

Jim Wilson, science editor with Popular Mechanics, said the magazine has followed the project for a number of years and was present at the national media presentation of the system in April. "It represented a very clever use of existing technology to solve an extremely difficult problem," he said.

He said this year the magazine has explored about 500 new scientific and engineering projects and JLENS is one of the top three. The magazine selects awards in several categories, Wilson said, and JLENS is one of the winners in the scientific category. The other two are a new genetic engineered drug and a passive permanent magnet bearing.

In 1996 the Department of Defense selected the Army to take the lead in establishing a joint project office with the Air Force and Navy to develop a joint cruise missile defense capability. The U.S. Army Space and Missile Defense Command was given the project and the command chose Huntsville, Ala., to set up the project office.

According to Grannan, the project is presently in the radar design phase. He said the JLENS concept includes elevating the radar to 15,000 feet to increase line of site ranges and overcome the obstacle of the curvature of the earth and obstructions such as mountain ranges.

At that elevation, Grannan said, the radar can track incoming missiles from about 200 miles out. The aerostat platform is used to elevate the radar, which is enclosed in a windscreen under the helium-filled aerostat, or balloon.

"We chose an aerostat for its cost effectiveness. Instead of all the people and fuel needed to keep airplanes up and flying, we only need a ground crew of six to monitor the balloon.

No one is on the balloon and it can stay up for about 30 days, instead of the 12 to 16 hours a plane can fly before having to land, refuel and change crews," Grannan said. The balloon is not free-floating though; it is tethered to the ground.

**The JLENS project office won a 'Popular Mechanics' award for a "very clever use of existing technology [the aerostat] to solve an extremely difficult problem." The aerostat is a commercial, off-the-shelf, helium-filled airship, or balloon, manufactured for more than 23 years by TCOM, in Elizabeth City, N.C., with headquarters is in Columbia, Md. *(Photos by LuAnne Fantasia.)***

**The JLENS radar is enclosed in a windscreen under the aerostat. When the radar picks up a missile it sends tracking information through a tether, to the mooring station on the ground, and out to joint units, so a fire decision can be made.**

He said, besides the low maintenance for the aerostat, its durability is also cost effective. Grannan cited an example of a ground crew working on the southern border that noticed one of its aerostats loosing altitude, so they brought it down and saw it had 12 bullet holes in it. "So, it is durable and obviously can remain aloft from several hours to several weeks with holes in it."

When the radar picks up a missile it will send tracking information through the tether of the aerostat and out to Army, Air Force and Navy units so the missile can be monitored and a fire decision can be made, Grannan said.

Army Col. Mary Fuller is the new project manager for JLENS since August. She replaced Col. Herb Carr, the program's first project manager since 1996, and who is now deputy director of the U.S. Army Missile Research, Development and Engineering Center, Redstone Arsenal, Ala.

**The mobile mooring station allows joint units to exchange radar data—"*linking the joint digitized battlefield.*"**

**Air Force Maj. Bob Knapp is one of JLENS' deputy project managers.**

# See you, see me technology—from a desktop VTC

**by LuAnne Fantasia**
**Huntsville, Ala.**

With travel budget cuts across the board this fiscal year, a lot more people in the command are going to be going TDY via their office desktop video teleconference equipment.

"You don't want to know what we spend in travel in this command," said Lt. Gen. John Costello, during a recent town hall meeting with Huntsville soldiers and employees. "Everybody's travel will be cut 20 percent next year, beginning with my own."

The commanding general said he thinks as people take more advantage of the recently installed 32 desktop VTCs throughout the command, it will cut down on meetings, "and make us more efficient."

Jack Miller has some early ballpark figures to help support that prediction. Miller is the team leader for visual information in the command's deputy chief of staff information management in Huntsville. It is his team that has worked relentlessly for months to make this new technology available in the command.

"It averages out to about 84 cents a minute across the command," Miller said, explaining that the 32 desktop VTCs each require three telephone lines [for full motion capability], with costs varying from Washington, D.C., to Colorado Springs, to White Sands, N.M.; to Huntsville.

Miller said the initial, one-time cost for each setup was less than $7,000, and that his team had to change platforms—from Windows to NT.

"The easy solution would have been a network one, but we needed to run full-motion," Miller said. "So we went outside our network pipe and basically went to a telephone network solution. That's the only piece we do not control right now because we can't control Ma Bell."

Mark Delashaw, a corporate VTC coordinator with Nichols Research, and Larry Cottles, a desktop architect with Quality Research, have both worked the project with Miller.

Cottles said, "ISDN is not the permanent answer, but due to network limitations and until we can expand our network capabilities, we must use it. But, the technology for both is installed," he added, "so we can switch to network in the future, [when the bandwidth is available] and can support other future communication needs."

Miller said using a network solution at full motion for this project, "would be like trying to push a basketball through a soda straw."

The precursor to all of this was a simple testbed in 1998 between the Battle Lab here and Colorado Springs, Colo., according to Miller. After that, and after funding for the entire project, Miller said the team had less than two months to find the right product, run the technology through a testbed, and begin to field. Miller said the products purchased were PictureTel 550s, which offered full-motion capability.

Cottles said, "In some sites, we merged the telecommunications with existing computer hardware, making it one unit and taking up a lot less space." This had some domino effect, affecting other computer software and amenities, Cottles said, and the systems are probably not being used to their full potential yet, because of the transition and learning curve.

Miller said four geographical locations have been fielded: Huntsville, HELSTF at White Sands, Colorado and Washington, with three different locations in Washington—headquarters, the FDIC and ASPO.

Some sites are still pending in the command's Arlington offices, due to renovations there, and Kwajalein will be brought online last, according to Miller. "We knew, going in, that Kwajalein would be last, for several reasons," he said, one of which is the limited communication connectivity resources on the island.

"We do expect a turn on date for Kwajalein sometime during the next year," Miller said.

He said this technology is an evolving one. "If we had an appropriate test lab to continue the progress of the desktop VTC technology, we could go multi-point (conference) and secure. Everything requires proper testing before we can field it. We've learned through what we've done so far."

"And, we know we'll eventually have to go to a network solution, in order to track how much the capability is being used, and to project maintenance requirements. Right now, we don't have a mother ship. Everyone is their own network," Miller said.

## User feedback

Two of the command's early users said the desktop VTC has already saved them time and stress.

Jess Granone, director of the command's Space and Missile Defense Technical Center, is excited about the technology. "Recently, the commanding general asked me to be in a 45-minute meeting in his office on a Friday afternoon. I asked if I could attend by DVT, he said yes, it worked great, and I saved myself from another trip to D.C.," Granone said.

Larry Burger, director of the command's split-based Battle Lab, said the capability is a huge helpmate between his Huntsville and Colorado Springs staffs. "We have weekly staff VTCs, and routinely have business meetings [at all levels] using the desktop VTC equipment," Burger said.

---

*Battle Lab leads the way*

# *Tactical operations centers get upgrades for interoperability*

## 32nd AAMDC, Fort Bliss, Texas, gets first upgrades

**Staff compiled**

Leading by example is characteristic of a high performance organization.

That's what the commanding general wanted when he challenged the command's Space and Missile Defense Battle Lab to lead the way for the U.S. Army by entering into the new century with new technology for operations centers of the future.

The baseline for this effort would be the modernization of the Next Generation Tactical Operations Center, or TOC, for the 32nd Army Air and Missile Defense Command, Fort Bliss, Texas.

"General Costello is serious," said Norven Goddard, chief of the Battle Lab's combat applications division. "He wants the Battle Lab to be on the cutting edge of injecting new technology into Army elements, and he wants other services to look to us [Army] as leading the way."

The "new millennium" technology is a prototype that will reflect a totally different way of thinking about integrating pieces, according to Goddard.

"We are taking advantage of new software and software development techniques to get away from our present concept of a single computer for a single function. Operators will tell a single computer the information needed instead of having to go to individual systems," Goddard said.

"We're exploring using new wireless concepts relative to the time spectrum versus frequency spectrum, and we're trying to take advantage of the commercial world investments and apply them to our applications."


The immediate beneficiary, the 32nd AAMDC, has a mission to maintain interoperability with other required organizations. Their current tactical operations center is a multi-function facility with requirements for Army and joint operations.

"The 32nd's biggest benefit will be a focus on functions versus specific stand-alone programs," Goddard said.

"We're building a prototype system that takes the 32nd's functional operational capabilities and addresses new and innovative ways of integrating these elements and driving interoperability between functions," Goddard said.

Hardware upgrade possibilities include going to a complete NT based system, using wireless local area networks, innovative correlation algorithms, common mapping integrated battle studies concepts, man-portable staff stations, and a robust communication architecture, according to Goddard.

And how do the upgrades enhance interoperability? "The new software techniques and enhancements in computer minimization allow us to readily integrate functional capabilities on a single platform utilizing client or server architecture," Goddard said. "That gives us the desired interoperability, i.e., the same database to push or pull information per functional need."

*(Gerda Sherrill, Norven Goddard and LuAnne Fantasia contributed to this article.)*

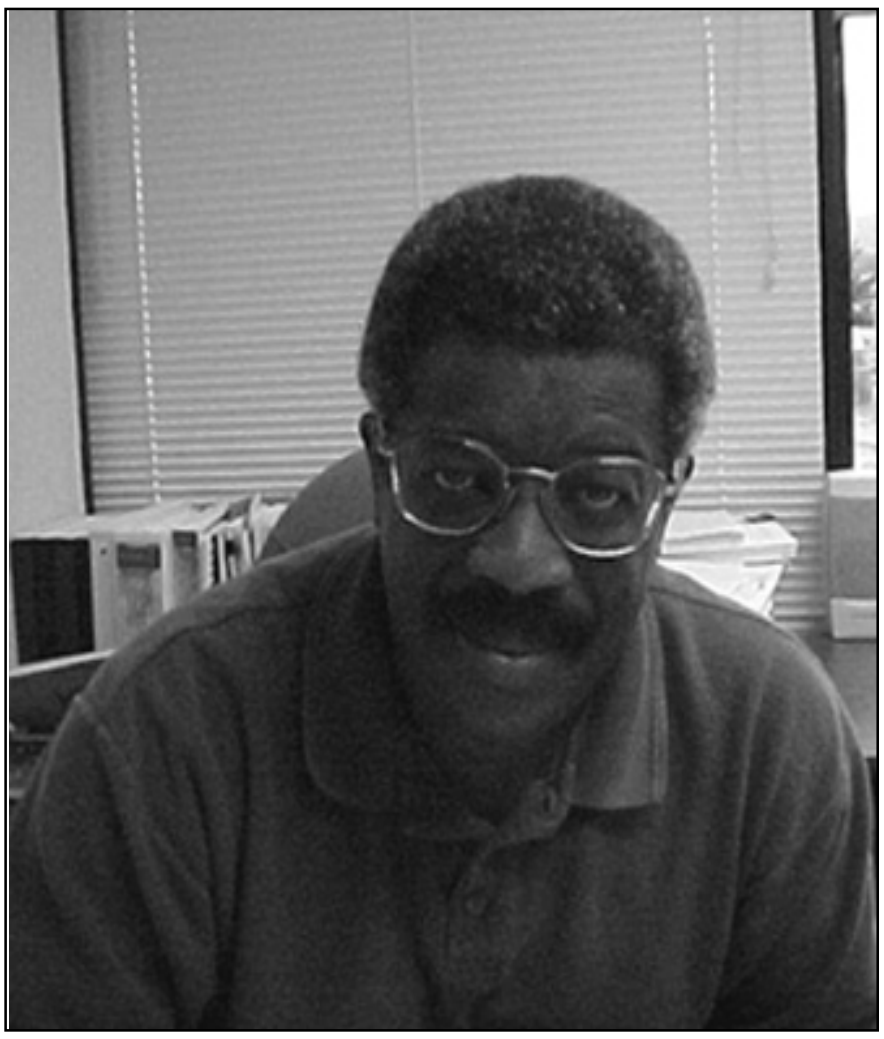


Photo by Ed White

**Clyde Ellison, logistics managment specialist at the Army Space Command, earned his second master's degree this year, and completed certification for the highest level achievable in acquistion logistics.**

# *Ellison reaches educational goals*

**by Melva Tillar**
**Colorado Springs, Colo.**

Clyde Ellison never intended to get a second master's degree. The calm and even-tempered logistics management specialist is responsible for monitoring and ensuring all necessary integrated logistics support is provided to Army Space systems and subsystems.

Ellison earned his bachelor's degree from Regis University in Colorado in 1982 and a master's degree from Webster University in Colorado in 1983.

But he didn't stop there. This year he earned a second master's degree, and completed certification for Level III by the Space and Missile Defense Command in Acquisition Logistics, the highest level possible.

Ellison spent 21 years in the military, specifically in the supply and logistics fields. "After I retired, I naturally sought employment in the area in which I had the most expertise," said Ellison.

He said he was motivated to go back to school while serving on a source selection board. "I realized how much more I could and should know about the acquisition process. While I had gained enough knowledge over the years to perform the required functions, I knew there was so much more information available."

He first took a contracting class to simply brush up on his skills. One class led to another and before he knew it, he had completed over half the required classes needed to obtain a second master's degree.

There were obstacles to overcome, he said. "Because of the nature of my job, I am required to travel on a fairly regular basis, which caused me to miss more than a few classes. Fortunately, more and more colleges and universities accommodate working adults and Webster University is geared to working with your schedule," he said.

"In five years I see myself drawing closer to retirement with anticipation. I plan to remain in the area of logistics. The field is ever changing and always challenging."

Ellison enjoys golf, travel, and exploring lighthouses. He has seen nearly 100 lighthouses in America, as well as a few in Canada. He also likes yard work, driving or hiking in the mountains, and skiing.

"I'd like to give special thanks to my family for their support during the many late nights and long days," he said. "Also, to Mrs. Daryll Nottingham, director of contracting, for the opportunity to sit on a source selection board, and to the command for its support to employees pursuing higher education."

# *First space battalion meets challenges of new century*

**by Ed White**
**Colorado Springs, Colo.**

*Army history will be made in December when Army Space Command's 1st Space Battalion stands up*

"The 1st Space Battalion helps institutionalize space within the Army by giving our soldiers a familiar structure to work with," said Lt. Gen. John Costello.

"This unit is an example of the type of organization that will enable the smaller, lighter, more agile fighting forces recently envisioned by General Eric Shinseki, the Army Chief of Staff," the commanding general said.

The new battalion's commander is Lt. Col. Tim Coffin. "[This activation] ceremony will be a big step in the Army's march to the future," Coffin said. "The bottom line is that the 1st Space Battalion will provide the right space support for army warfighters on time and on target."

Prior to the formation of the 1st Space Battalion, the Army's four Space Support Teams and five Joint Tactical Ground Station sections worked under the Army Space Command Staff G3 to provide support to exercises and operations Army-wide, Coffin explained.

"Under the new battalion structure, these key elements that bring space support to the warfighter are brought under the operational control of a commander focused on providing immediate space support," he added.

"Our goal is to continue to normalize space operations in the Army," Coffin said. "The new structure makes the chain of command much cleaner, while providing the flexibility we need to meet the space challenges of the new millennium."

"We structured this battalion so it would retain a great deal of flexibility to respond and grow quickly," Coffin said.

"This allows us to adapt new technologies and rapidly respond with maximized support from space to meet the needs of our military forces which continue to be involved in fluid, worldwide operational situations."

He said the battalion provides Army units both the tools and the expertise to take maximum advantage of our nation's tremendous on orbit capabilities.

"The highly mobile teams and detachments tailor their capabilities and products to maximize responsiveness to the soldiers we support," Coffin said. "The Mobile Technology Team will be a key element to keeping up with the rapidly advancing technologies in the space arena of the new battalion.

The team will work closely with commercial firms and the Space and Missile Defense Battle Lab to rapidly adapt the latest space technologies for use by the soldier," Coffin said. "This will help determine if there can be space-based solutions to battlefield problems."

The new space battalion is a Total Force effort. "One of our near term goals is to augment the five active duty Army Space Support Teams with four Reserve component teams," said Maj. George Anton, Force Development officer at Army Space Command.

"The battalion will incorporate reserve component space experts who will train and operate alongside their active duty counterparts."

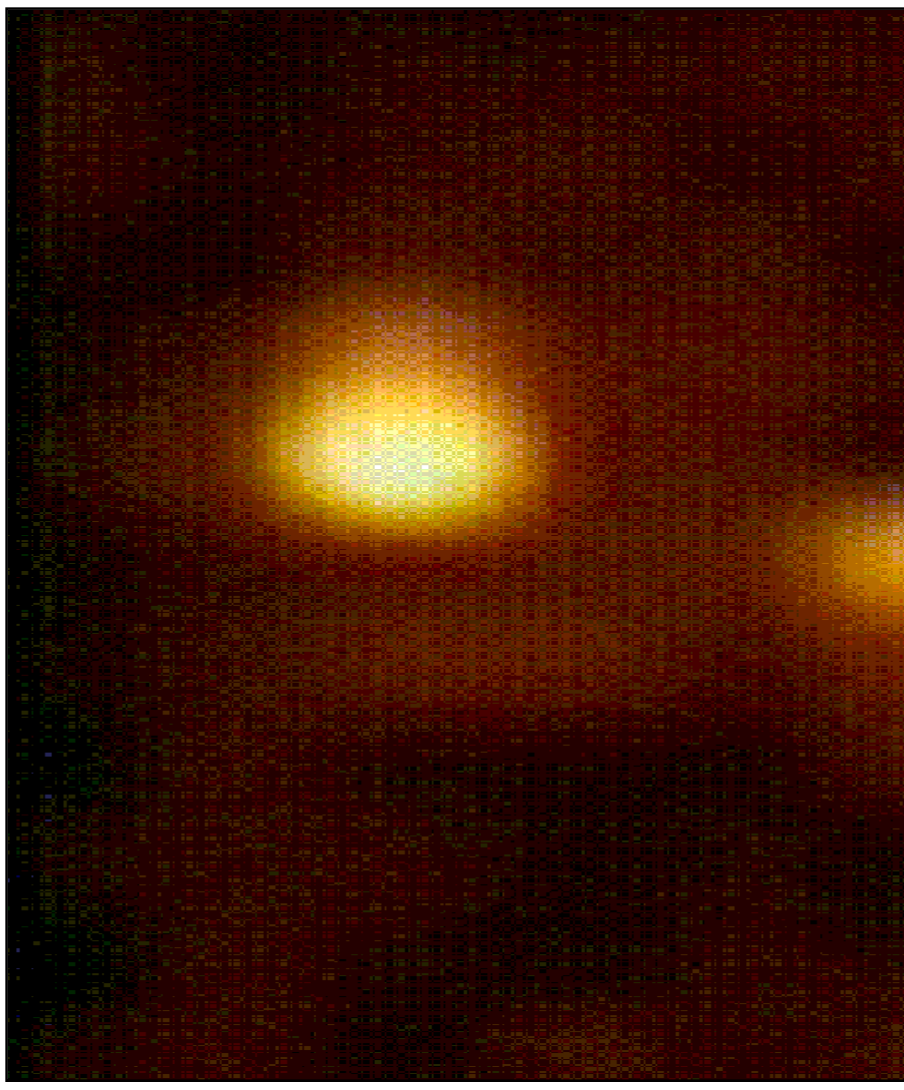
"I'm excited about the role I'll play in bringing space support to our warfighters," said Maj. Leonard Draves, 2nd Army Space Support Team Chief.

"I feel honored to be the first reservist assigned to the battalion and charged with the task of incorporating the reserves into the Army Space Support Teams.

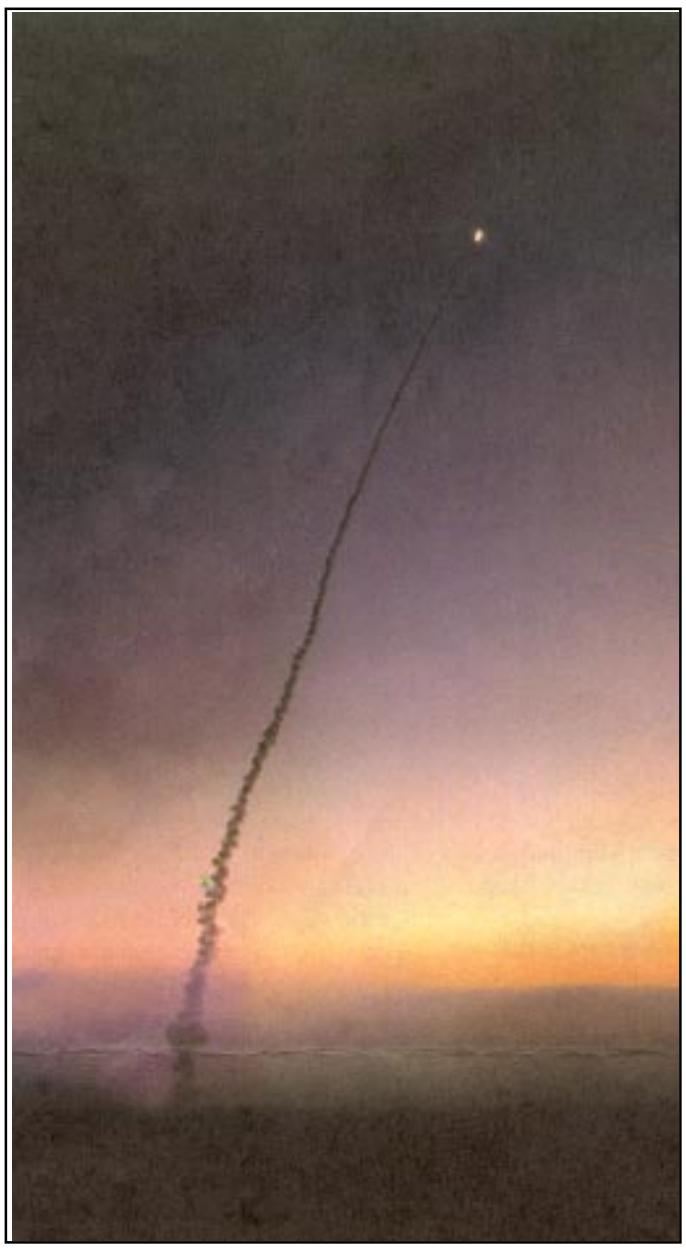
UNITED STATES ARMY
SPACE COMMAND

***"Time on target"***

# National Missile Defen



( Photo above) This is a graphic of AST (Airborne Surveillance Testbed) Exoatmospheric Kill Vehicle, or EKV, as it approaches the target. (Photo HALO FFIRST images (false color enhanced) shows the IFT-3 intercept f mid-wave IR band.



**The target launch and flight for IFT-3 were picture perfect. The successful national missile defense intercept happened early morning, Oct. 2.**

**The Strategic Target Product Office's target launch system—a modified Minuteman II—undergoes final assembly at Vandenberg Air Force Base Launch Facility #3.**

**Staff compiled**

The National Missile Defense program's Integrated Flight Test 3 was a *smashing success*, Oct 2, and SMDC's Ballistic Missile Targets Joint Project Office and the Strategic Targets Product Office confirms it.

The IFT-3 target is more than a clay pigeon. "The target launch system is a complex aerospace system," said Lt. Col. Tom Harvill, product manager for the Strategic Targets Product Office. "The primary target requirement is to represent specific characteristics of a threat re-entry vehicle…flight path, body motion, radar cross-section, optical and thermal signatures."

In one respect work on the target launch system began in 1965 – the target booster served this nation well for many years during the '60s and '70s while on alert status with Air Force Strategic Command. The Minuteman II is now retired, and the targets office reuses its boosters as the target launch system. Reuse avoids some of the cost of developing a new launch vehicle.

The Minuteman II boosters are refurbished at Hill Air Force Base, Utah. Lockheed Martin Astronautics in Denver, Colo., builds the Multi-Service Launch System flight control system, and Sandia National Labs, Albuquerque, N.M., builds the actual target objects. These three major sub-systems come together for launch from Vandenberg Air Force Base, Calif., according to Harvill.

"Lockheed and the Air Force Space and Missile Systems Center Detachment 9 provide the system integration and launch services, with the Strategic Targets Product Office managing all of these activities from Huntsville," he added.

The target is equipped with a variety of subsystems including an attitude control system, sensors, and transmitters to communicate performance to ground stations. "This instrumentation permits the targets office to provide post-mission truth data on precisely how the target performed," Harvill said.

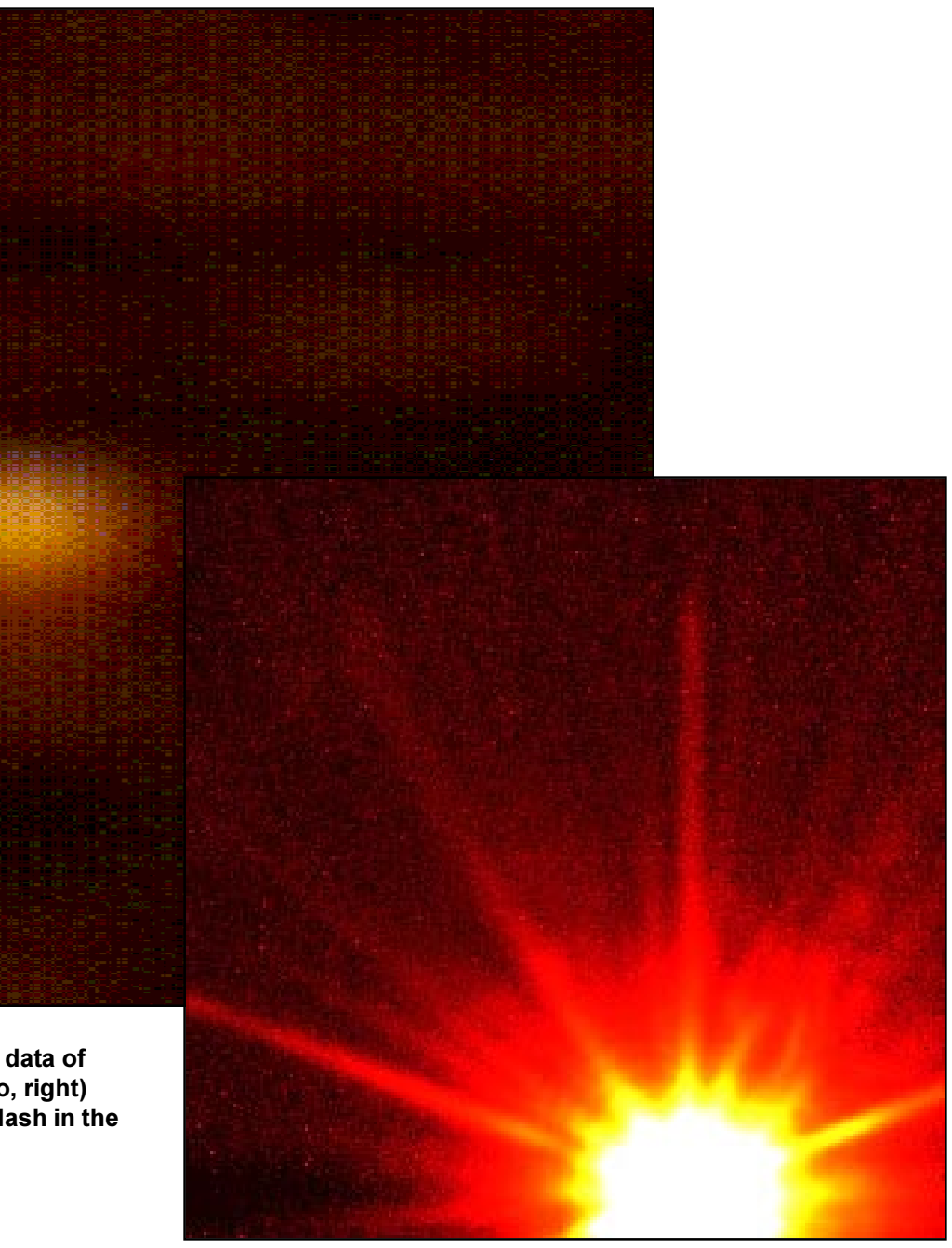
The command's Weapons Directorate, Lethality Division and their contractor, ITT Industries, equips the target reentry vehicle with the Photonic Hit Indicator, or PHI. The Lethality Division's director, Dr. Bob Becker, said the PHI helps determine the first point of contact of a hit-to-kill interceptor on flight targets.

"Lethality is the ability to destroy the nuclear, chemical, biological, or high explosive payload inside a target. It is critically dependent on where a hit-to-kill interceptor impacts the target," Becker said. "The PHI is 'standard equipment' on national and theater missile defense targets."

Becker explained that a fine mesh of optical fibers covers the target's surface. "Each fiber is illuminated by a miniature laser on one end, while at the other end, a photo diode monitors the light that is transmitted. When the interceptor hits the target, fibers are broken and the transmission of light is interrupted. This change in light transmission in the fibers is analyzed by the on-board PHI computer to determine which fibers are being broken and formats a digital message that is transmitted and recorded," he said.

This process continues until the impact destroys the PHI computer, its telemetry transmitter, or other critical PHI components. "Obviously, this process must work at lightning speed. For IFT-3, the impact occured at a velocity in excess of seven kilometers per second. PHI successfully recorded the first impact region on the target by registering the break of 12 fibers (it only requires 3 fibers to determine the first point of contact) before transmission ended. This information was collected, analyzed, and transmitted to the ground in 25 microseconds—millionths of a

# *se system nails target!!*



**data of
o, right)
lash in the**

second!" Becker said.

## No margin for error

Harvill stressed that the target team's challenge is to find the right balance among competing requirements. "The system must meet specific performance parameters, and due to the high cost of ballistic missile testing, the target should never be responsible for delaying the national missile defense testing schedule," he said. Finally the target must be provided within budgetary limitations.

He is quick to recognize the key to success. "Our people are the key to finding the right balance, and achieving successful launch. We have a team of hundreds of people putting the target launch system together. All of these high tech components and subsystems are only as good as people designing and operating the equipment," Harvill said.

Based on the picture perfect success of the IFT-3 target, the target launch team is a world-class organization.

## HALO and IRIS also played

From its viewing location 47,000 feet in altitude—just above a thick band of tropical clouds that characterize Kwajalein's rainy season—the command's HALO aircraft had a unique view of the exoatmospheric kill vehicle, or EKV, IFT-3 mission. The position of the HALO aircraft afforded its suite of specialized cameras and sensors the closest view of the intercept allowed by Kwajalein Missile Range Safety. On-board sensors included:

—IRIS (InfraRed Instrumentation System)

—FFIRST (Fast Framing Infrared Scoring and Tracking)

—HIMR (High-Intensity Multi-band Radiometer)

The aircraft's photo-documentary cameras also provided the only view of the deployment of the EKV interceptor.

The HALO and its mission crew of 13, including pilots, mechanics, engineers, and technicians, deployed to Kwajalein one week before the mission.

Kwajalein Missile Range provided tracking data to assist HALO operators in recording the intercept. Data gathered included MWIR radiometric and visible images of the intercept cloud as well as very-high-time-resolution of the intercept flash.

The HALO aircraft and two of the optical instrument platforms within the aircraft – Alpha and Beta — are operated by Aeromet, Inc., of Tulsa, Okla. The third optical platform, IRIS, is operated by CACI-ASG of Huntsville, Ala. IFT-3 was HALO's 101st mission and IRIS's 80th mission.

## AST—always watching

The Airborne Surveillance Testbed, or AST, aircraft deployed to Kwajalein Sept. 30, to support IFT-3.

AST gathered hundreds of seconds of infrared, or IR, signature and tracking data on the target object complex.

AST observed the intercept event in Target Following Mode, providing 10,000 Hz data on the EKV as it approached and collided with the reentry vehicle, then scanned for intercept debris.

*(Continued on next page)*

**Prototype NMD interceptor launches toward target from Kwajalein Missile Range's Meck Island.** ***(All photos are courtesy photos.)***

# NMD

*(continued from page 7)*

The AST sensor platform is a Boeing 767 aircraft modified by the addition of an 86-foot-long cupola housing a Raytheon long wavelength IR sensor. Funded by the Ballistic Missile Defense Organization, and managed by this command, the AST collects and processes infrared target data on ballistic missiles.

Operating at altitudes above 43,000 feet, the AST conducts long-range detection, tracking, and IR signature characterization of ballistic missiles in all phases of their flight, from boost through reentry.

The sensor has advanced wide field-of-view optics and a focal plane array that contains more than 30,000 cryogenically cooled LWIR silicon detector elements. Extensive signal and data processing is performed in real time to accommodate the large volume of focal plane array data.

The AST has completed 72 successful data gathering missions to date, and continues to provide valuable IR phenomenology data and a unique tested capability for this command and the Ballistic Missile Defense Organization.

## Kwajalein Missile Range

Range personnel felt pretty confident going into IFT-3, with comprehensive pre-mission simulations and hours of preparation.

A symbolic gesture from the heavens didn't hurt either when those removing the access stand on Launch Hill spied a rainbow which appeared to come out of the access stand and follow the planned trajectory of the ground-based interceptor.

"When we saw that, we thought it was going to be a good day, and it was," said Jim Hill, Kwajalein Missile Range site manager for the national missile defense program.

"The bottom line is that it was good for the program and good for the nation and it reflects on the launch team and support team of KMR."

The modified Minuteman intercontinental ballistic missile target vehicle was launched from Vandenberg at 7:02 p.m. (2:02 p.m., Kwaj time), and a prototype NMD interceptor was launched approximately 20 minutes later from Meck. They intercepted approximately10 minutes later.

"The screaming went on for five minutes," Hill said, about the control room on Meck. "Everyone was just ecstatic."

"This was a difficult mission not only for the NMD team but for KMR also," added Dave Shattuck, mission technical director for IFT-3, at Kwajalein Missile Range.

"During the mission, the command center was extremely busy until about 30 minutes after the Vandenberg launch when both missile trajectories met. Unlike most missions where a data analysis process deems whether you have succeeded or not, this mission culminated with such a conclusive event that was broadcast to the world via the VTC," Shattuck said.

"The giant flash from the *super* Radot camera located on Roi told the world that national missile defense is a reality."

The test successfully demonstrated hit-to-kill technology to intercept and destroy a ballistic missile target. The EKV weighed about 120 pounds; was equipped with two infrared sensors, a visible sensor, and a small propulsion system, located and tracked the target, guiding the kill vehicle to a body-to-body impact with the target, and resulting in the target destruction using only the kinetic energy of the collision.

This hit-to-kill intercept demonstrates that a warhead carrying a weapon of mass destruction, whether nuclear, chemical or biological, will be totally destroyed and neutralized.

The successful intercept was the first of about 20 planned intercept tests to demonstrate national missile defense system technology, effectiveness and reliability over the next six years.

"The difficulty of the mission sometimes gets lost when success is achieved on the first attempt," Shattuck said. "As a result, future NMD missions here at KMR will even become a little more difficult because of exceedingly high expectations, but I believe that Team KMR is up to the challenge."

*(Maj. Jim Atkinson, Dr. Bob Becker, Gerda Sherrill, Stewart Horn, Dave Morrell, and the staff at Kwajalein Missile Range contributed to this article.)*

# SADBU Questions Answered

**by John Ralls**
**Huntsville, Ala.**

Each specialized area of our command has its own peculiar job language. The acronyms we use often are the same, but have different meanings. Some, like SADBU, are downright foreign.

What does SADBU mean? What does it do? How does it fit within the missions of this command? Why is it important to me?

The answers to these questions will help define the command's common language necessary for the APIC process and help everyone understand the role of an important command element. In this, and future *Eagle* articles, the SADBU will be defined, its purpose described, its programs explained, and its role in the command's Strategic Management Process crosswalked.

First, the basic definition: *Small and Disadvantaged Business Utilization, or SADBU*. The acronym is used interchangeably to describe the special staff office itself; the office staff; (associate director or the small business specialists); or various national socioeconomic business programs the office manages.

The SADBU office assists commanders of procurement organizations to meet their obligations under various socioeconomic business statutes that have been enacted by Congress; Executive Orders issued by the President; and policies established by the Small Business Administration and the Secretaries of Defense and the Army.

The first of these obligations was created by the Small Business Act of 1953, which made it the policy of the federal government to place a fair proportion of acquisitions with small business concerns. In order to aid compliance with this policy, the Act required each agency with contracting authority to establish a SADBU office and appoint a SADBU specialist to manage the program. Since 1953 other laws have been passed that have been extended and expanded business opportunities for small and disadvantaged business groups. The newest of these programs was created by the Veterans Entrepreneurship and Small Business Development Act of 1999.

The SADBU programs are governed by Public Laws specified in Part 13 of the Code of Federal Regulations; the Federal Acquisition Regulation, or FAR; the Defense FAR Supplement, and the Army FAR Supplement.


Today, there are nine distinct socioeconomic business programs that must be considered when formulating acquisition strategies for all SMDC and PEO AMD contracts which our command executes. Each of these programs will be profiled in future *Eagle* articles. The programs are:

(1) Small Business Set-Aside Program,
(2) Small Disadvantaged Business Programs, including the "8(a)" Business Development Program
(3) Woman-Owned Small Business Program,
(4) Historically Black Colleges and Universities/ Mi nority Institutions Program,
(5) Historically Underutilized Business Zone Program,
(6) Very Small Business Program,
(7) Veterans Entrepreneurship and Small Business Development Program,
(8) National Institute for the Blind/National Institute for the Severely Disabled Program, and
(9) Federal Prison Industries Program

Each year the Department of Defense and the Small Business Administration negotiate small business program goals in concert with the President's government-wide goals. The Secretary of Defense then assigns a portion of his goals to the Army, and the Army Secretary, in turn, assigns SMDC a part of his requirement. These goals are expressed as percentages of total contract dollars obligated.

The command SADBU office is comprised of John Ralls, associate director; Christine Smith, small business specialist; and Shani Stover, secretary; all located in Huntsville. Phone: (256)955-3412. Fax: (256)955-1009. Daryll Nottingham, in Colorado Springs, Colo., assists by performing the SADBU functions for all ARSPACE requirements. Phone: (71 9)554-8820 Fax: (719)554-8838

*(The author is the associate director of the SADBU office in Huntsville, Ala.)*

# Plan it, do it, evaluate it

Make it happen!

**by Blake Myers**
**Arlington, Va.**

The word *strategic* simply means something is an important part toward achieving a desired outcome. Although it hasn't been a simple task to put a strategic management plan together, the wheels have been turning for the past year, with leadership's full support.

Soon after establishing the Deputy Chief of Staff for Strategic Planning and Analysis in October '98, the command began to develop a strategic management system to guide strategic planning and execution efforts. The evolving system consists of four phases; strategic planning, implementation, execution, and performance evaluation.

## Strategic Planning Phase

Strategic planning clarifies our mission, vision, values, goals, and objectives, to identify stakeholder requirements, to focus the command's efforts to meet these requirements, and to foster an environment and philosophy of continuous improvement over the long term.

The objectives of the strategic planning phase are:

—assess how well the command meets customer requirements and expectations

—identify specific goals, objectives, and actions to meet customer requirements and expectations

—provide focus for command programs and activities.

Products of the strategic planning phase are the *Strategic Plan* and the *Command Action Plan Workbook*. These documents describe the command's strategic goals and objectives and define the accomplishments that will move it toward its desired future. The strategic plan provides the framework and focus for everything the command does or should be doing.

The *Command Action Plan Workbook* includes all command actions developed during the strategic planning phase, key tasks and milestones for each command action, and the designated lead—major subordinate elements or staff elements—for each command action. Command actions are the key horizontal integration mechanism, and are developed to support the achievement of each strategic objective. Designated command action leads are responsible for monitoring and coordinating the accomplishment of the command action, monitoring the status of supporting action plans, and briefing command action status during scheduled Space and Missile Defense Activity Based Review and Evaluation, or SABRE.

The proponent office for both the *Strategic Plan* and *Command Action Plan Workbook* is DCSSPA. Both documents are accessible on the Command Net.

## Implementation Phase

Successful implementation of the *Strategic Plan* requires the commitment of every member of the command: military, civilian employee, and contractor. Implementation includes the development of MSE and staff action plans, development of the *Investment Strategy*, and development of the S*trategic Communications Campaign Plan*.

MSE and Staff action plans specify actions and associated resource requirements necessary to accomplish the key tasks and milestones specified in command action plans. Said another way, an action plan is the MSE or Staff plan to accomplish a key task/milestone for a command action.

The *Investment Strategy* has two purposes: to guide the command's resourcing, budgeting, and programming efforts, and to align and focus resources over the long term to achieve command strategic goals and objectives. The investment strategy is based on a comprehensive assessment of how we allocate resources, such as people, funds, facilities, and equipment, to achieve its goals and objectives.

The *Strategic Communications Campaign Plan*, *or SCCP.* This plan is designed to favorably shape and influence policy, resource, and programmatic discussions and decisions that directly impact the command and its subordinate elements. The SCCP involves the command's leaders and is also planned and coordinated through the DCSSPA.

Command strategic communications effort is focused on delivering the right message to the right audience at the right time. A key element in executing the SCCP is the Strategic Communications Working Group. This group, composed of representatives from each MSE and principal staff element, is charged with coordinating and monitoring execution of the SCCP and supporting communication action plans.

## Execution Phase

Execution is the truly challenging part of any operation. Up to this point in the process, strategic planning and management have focused on planning and developing plans and processes. Executing the Strategic Plan requires doing the work—executing the actions and producing the products. USASMDC uses the construct of action plans to plan, monitor, align, and execute specific actions and tasks at the MSE and Staff level. Each MSE and Staff directorate develops and executes action plans that support command actions or strategic communication events.

We execute the *Investment Strategy* to address imbalances in strategic goals and objectives, and resources. Investment strategy execution involves continuous monitoring and necessary adjustments of resource investment and allocation to reflect fiscal realities and programmatic changes.

## Performance Evaluation Phase

Performance evaluation is measuring how well we, as a command or a subordinate element, are doing. Are we accomplishing the planned actions and tasks to the established standard or performance measure? The command's performance evaluation effort has three components; *Army Performance Improvement Criteria*, *Command Program Review*, and *Space and Missile Defense Activity Based Review and Evaluation.*

*Army Performance Improvement Criteria, or APIC.* The Army developed and implemented the APIC in October 1995 as its unifying management assessment framework with the goal of improving the overall effectiveness and efficiency of all Army organizations. Closely linked to the President's Quality Award Criteria and the Malcolm Baldrige National Quality Award Criteria, the APIC is designed to improve performance practices, facilitate communications and the sharing of best practices of information among organizations, and to serve as a working tool for understanding and managing performance, planning, and training.

The APIC framework contains seven separate, but interrelated, categories - leadership, strategic planning, customer focus, information and analysis, human resources, process management, and business results. Beginning this fiscal year, the command began a three-phase APIC implementation plan with a goal of achieving *Best in Army* outcomes.

*Command Program Review, or CPR.* These reviews are conducted as necessary to review structure, focus, synchronization, funding, contract status, and pertinent issues for specific key programs. The commanding general, the deputy commanding general, or the chief of staff determine which programs require a review.

*Space and Missile Defense Activity Based Review and Evaluation, or SABRE.* The command conducts SABREs on a quarterly basis to review the status of command actions, modify, add, or delete command actions as recommended by command action leads, and "close out" completed command actions. During SABREs, command action leads brief the status of their respective command actions and make appropriate recommendations. As the proponent office for SABREs, DCSSPA schedules and coordinates the conduct of SABREs, and publishes SABRE agendas along with appropriate briefing formats.

Strategic management is a cyclical process where steps to be taken between the various phases is sometimes unclear. In practice, phases tend to overlap, particularly when initiating a new strategic planning phase. The overview presented in this paper is intended to provide a basic framework for understanding the process. Additional information is available on the Command Net under *Strategic Planning*.

# *Mark you calendars for a MARKS staff visit*

## Just for the record….

**Staff compiled**

With less administrative support and more tasks being done by action officers, more files and records are piling up.

That has to change, according to LaJeannia Lacey, the command's record manager since 1993. "Aside from not complying with regulations, we just don't have space for everyone to hold on to these files forever," Lacey said. "We all need to be proactive in the disposition of the records we have created."

She said many records can be disposed of when they are no longer needed for everyday business practices. "These records need to be cut off or terminated at the end of a specified period of time or event, and a new file established. Depending on the MARKS [Modern Army Record-Keeping System] disposition, many records must be transferred or moved to our records holding area, currently located on Redstone Arsenal," Lacey explained.

As the command records manager, Lacey is available to assist anyone prepare their records for transfer or retirement. "Retirement is when we move your records from the office, or the records holding area, into the federal records center system [in Suitland, Md.].

She said there is a procedure for obtaining files back in their original format. "In the MARKS, files are maintained from creation through final disposition."

"For declassified documents, final disposition sometimes means storing them at the Washington National Records Center for two years, after which they're moved to the National Archives and Records Administration in Maryland," she added.

But Lacey said only those records worthy of permanent retention by the United States are sent to the National Archives, "because storage there is extremely expensive."

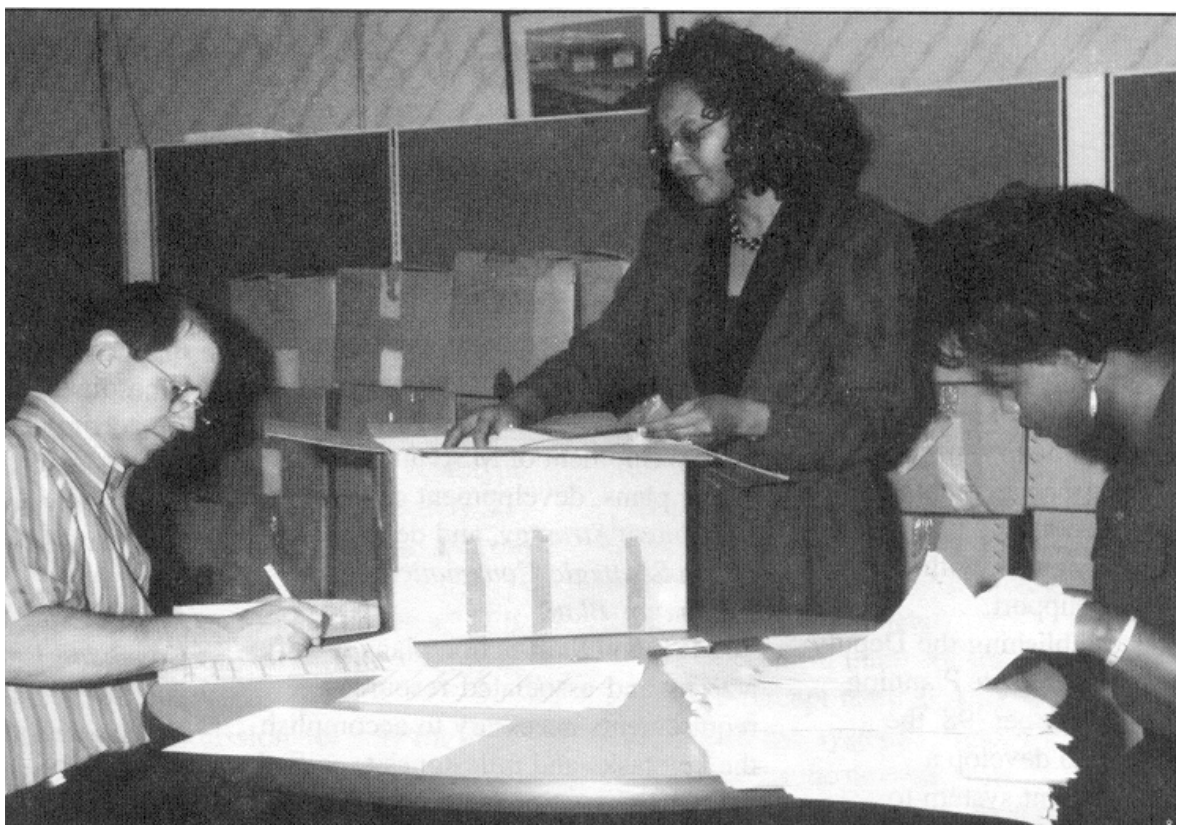
She explained that in '95, President Clinton signed an executive order directing that permanent, classified documents 25 years old or older be automatically declassified—whether or not reviewed for sensitivity—beginning the year 2000.

To that end, Lacey recently collected 46 boxes of classified, pre-1976 files, and with the help of two Army archivists, assessed and determined the disposition of the records.

The scope of this review specifically pertained to classified records, but Lacey said the wheels are turning now toward a command-wide file review of general office files.

"I'm scheduling visits now and will begin early this fiscal year. Everyone has time to determine where they need help, or start getting their office files in order."

For further information or guidance about office records, Lacey can be reached at DSN 645-3842, commercial 256-955-3842.



(Photo by Steve Gover)

**The command record manager, LaJeannia Lacey, (center ) recently declassified 46 boxes of records and prepared them for disposition. Helping her was Army Archivists Bob Storer (left) and Betty Parker. Parker is the chief archivist of the Army Records Management Declassification Activity, in Arlington, Va. Lacey will begin staff visits early this fiscal year, to assist all offices with proper disposition of their records.**

# *Recognize and honor veterans everyday*

**by Rudi Williams**
**American Forces Press Service**

WASHINGTON—Creators of the Vietnam Veterans Memorial on the National Mall here hoped a wall of names would help survivors heal emotionally and be America's tangible recognition of the sacrifices made by those who served.

The concept worked, said Jan Scruggs, one of the principal leaders in getting the memorial built. More than 4.7 million people from around the world walked the memorial grounds last year, making it the most visited monument in Washington.

Scruggs said many Vietnam veterans call the 'Healing Wall' their welcome home. "It's sort of a societal symbol by the country that service was recognized and appreciated," he said. "That's the important thing."

Now, 17 years after its dedication, the memorial is fast becoming an educational device for the younger generation, he said. "It touches so many people," he said, especially those who are too young to have gone to Vietnam and too young to know anything about the war.

The memorial was dedicated on Nov. 13, 1982, and initially had the names of 57,939 Americans killed in the war inscribed on its shiny black granite wall panels. The theater of operations and service dates were redefined and expanded over the years, so the number of names increased to 58,209 by Memorial Day 1997.

The names of the memorial's honored dead include eight women nurses—seven Army and one Air Force — 151 Medal of Honor recipients, and 16 chaplains—seven Catholic, seven Protestant and two Jewish.

The $8.4 million raised to build the memorial came from private donations. No federal funds were used.

People's reaction to the memorial has changed since 1982 as American culture has changed, Scruggs said. "It continues to mean a lot to people, not just the military veterans," he said. Its design and its messages of service, sacrifice and the tragedy of war touch everybody, he said.

The Vietnam Veterans Memorial is one in an American tradition that honors and preserves the memory of its fallen defenders. Other sites of interest on the Internet include:

The http://www.nps.gov/nama/index2.htm National Parks Service's National Mall Web site is a starting point for links to the Vietnam and Korean War memorials and others on the Mall in Washington.

The http://www.vvmf.org/ Vietnam Veterans Memorial Foundation Web site includes histories of the war and the memorial fund drive, photos, a searchable index of names inscribed on the memorial and a host of additional hyperlinks.

The http://www.nps.gov/kwvm/ Korean War Veterans Memorial was dedicated in 1995 and is the most recent of war memorials added to the Mall. The nation has many World War II memorials, but ironically no national one. The effort to build one on the National Mall, its design and fund-raising information are treated on the http://wwiimemorial.com/index.htm World War II Memorial Web site.

http://www.abmc.gov/ The American Battle Monuments Commission administers, operates and maintains 24 permanent U.S. military cemeteries and 27 memorials in 15 countries around the world, including five in the United States.

Virtual tour of the Pentagon http://www.defenselink.mil/pubs/pentagon/.

# Infobytes

## *Command recognized for support to university*

During an October conference in Huntsville, Ala., the command was recognized with an Award of Excellence given by the Alabama A&M University.

As a member of the university's Business and Industry Cluster, the command has supported the school in many ways for three decades.

Over the past 30 years, the command has awarded research grants, signed cooperative agreements that provided funding of certain research projects, recruited students and faculty for employment, and more recently, provided initial assistance in funding the establishment of the university's Research Institute.

[Then] Deputy Commanding General Brig. Gen. Steven Flohr was the guest speaker for the event.

## New website adds up military pay gains

The Defense Department has posted a new site on the World Wide Web that explains the military pay changes taking effect Jan. 1, including the 4.8 percent pay raise. http://pay2000.dtic.mil provides details on the January pay raise and briefly covers new retirement options; the Thrift Savings Plan that would allow service members to build a retirement nest egg; special pay and incentive pay improvements; and new rules on housing allowances, temporary lodging expenses and leave sell-back. The site also offers a means to provide e-mail feedback.

## Thrift Savings Open Season

Federal employees can begin their holiday gift giving early with a gift to themselves in the form of Thrift Savings Plan investments. Open season for the government's retirement savings and investment plan began Nov. 15 and continues through Jan. 31, 2000.

During this period, civilian employees with at least six months' continuous federal service may enroll in the TSP. Current participants can change their future contributions or the way they are invested.

The plan offers three investment funds.

## ARL Federated Laboratory Symposium

The Fourth Annual ARL Federated Laboratory Symposium will be held March 21-23, 2000, at The Inn and Conference Center, University of Maryland, College Park, Md.

The ARL Federated Laboratory Symposium is held annually to provide a forum for presenting research results.

The Symposium consists of three concurrent conferences: Advanced Sensors, Advanced Displays and Interactive Displays, and Telecommunications and Information Distribution.

For registration: Fax (757) 357-5108. E-mail caktmc@aol.com. For information, (757) 357-4011.

## NDIA monthly spotlight

Free Screensavers!!!!!! - http://www.ndia.org/screensavers/
National Defense Industrial Association has designed a series of military oriented screensavers for you to download. Each screensaver includes at least 20 high quality photos of military scenes.

Choose from Air Power, Ground Vehicles, Men & Women of the Armed Forces, Naval Warfare and our heritage series with images from W.W. II, Korea, and the Dawn of Aviation. You can download as many screensavers as you want and change them every day or week. You must have Microsoft Windows 95, 98 or NT to use the screensavers.

Small Business Resource Center http://www.ndia.org/services/smallbus/

NDIA has established an on-line resource for small businesses. Packed with links and articles, this section of the homepage helps our smaller member companies track the issues that affect them.

Government Policy Resources - http://www.ndia.org/govt-pol/new/resource.htm
Did you know that each month NDIA publishes a variety of reports on-line covering major defense legislative and regulatory issues? Visit the site to help prepare your company for any impending action on the hill.

Government Policy Survey - http://www.ndia.org/forms/ndia/govpol_survey2.htm
Participate in this year's Government Policy survey on-line.

DefenseJobs - http://www.defensejobs.com/
Version 2.0 of our defense industry employment database has just been released. Based on your many comments from last month, we have made numerous changes to the functionality and user-friendliness of DefenseJobs. We have several hundred current defense-related jobs on the site. Visit today to browse or post an employment notice. As always, DefenseJobs is free.

NDIA's fall meeting season is in full swing. For a list of upcoming conferences and events, visit: http://www.ndia.org/interview/register.ndia

## Military Family Week

"Our military families are the heart of our nation's Armed Forces," President Clinton said in his 1999 Military Family Week message, through the Armed Services YMCA.

"Time and again, military duty has called our young uniformed men and women to trouble spots around the world," Clinton said.

"And time and again, answering that call to duty has meant that families would be separated—for months and sometimes years at a time."

The armed forces celebrate Military Family Week each year during the Thanksgiving Holiday week, this year Nov. 21-28. Many installations hold special events related to family life during the weeks leading up to Thanksgiving.

The Armed Services YMCA prepared Military Family Week materials and disseminated them to military installations.

Included in the packets are copies of the 1999 Military Family Week poster, featuring the art of ASYMCA poster contest winner Cecilia Javier, 11, whose father is a master sergeant at Kadena Air Base, Okinawa.


Congratulations to our Army 10-miler runners (and finishers!): Cols.**James Ward** and **Bill McArthur;** Lt. Cols. **Scott Piro** and **Bob Boggs;** Maj. **Jonathan Cohen;** Master Sgts. **Lesley Hamilton** and **James Lussier;** Civilian employee, **Susan Jones**; and family members**, Matthew Piro, Kristal Hale** and **Tara Bathgate.**

*(Runners were sponsored by the Army Space and Missile Defense Association. Thanks! )*

### *Hail & Farewell ...*

Welcome to Carla Smith, Sgt. **Joseph Motley,** Sgt. 1st Class **Elizabeth LaBruda,** and Col. **John King.**

## *Farewell to Brig. Gen. Steven Flohr*

### *Awards ...*

Brig. Gen. **Steven Flohr**, Legion of Merit, 1st Oak Leaf Cluster; Maj. **David Lathan**, Army Commendation Medal; Maj. **James Nagel**, Meritorious Service Medal; Staff Sgt. **Frederic Rivero**, Army Commendation Medal; Sgt. **Kassandra Shigley**, Army Commendation Medal; **Mark Reavis**, Commander's Award for Civilian Service.

30-year pin, **Craig Dobson**; 25-year pin, **Gary Chambers**; 20-year pins, **Eddy Harrison**, **David Tilson**, **Thea Stewart**, **Carrol Crumpler**, **Michael Leech**, and **Glenn Green**.

Civilian Cash or Performance Awards: **Liz Keglovits, Nancy Huffaker, Ray Crumpler, Sharon Watkins-Lang, Dana Henslee, Bill Hughes, Ed Strange, Nelson McKown, Jim Walker** and **Jack Calvert**.

Civilian Service Certificates: 10-year, **Sharon Watkins-Lang**; 15-year, **Nancy Huffaker**; 20-year, **Beth Andrews**; 30-year, **Liz Hurt**.

### *Promotions ...*

Lt. Col. **Claudia Wigglesworth**; Selected for promotion to Major: Capts. **Artie Williams**, **Carlton Chappell**, **Christopher Baker** and **Carolyn Lynn;** Sgt. 1st Class **Terri Reed;** Civilian promotions: **Lynn Light, Candace Holcomb, Gil Adams, Beverly Osborn** and **Dennis Stout.**

(Photos by Sgt. 1st Class Bernard Couture)

## *Military Family Week celebrated Nov. 21-28...*

**Soldiers and family members of HHC, 1st SATCON Battalion, gathered a couple of weeks ago for a company Town Hall. Battalion Commander Lt. Col. Carole Best (top, left photo, in red shirt) was there to hear and discuss soldier and family concerns and issues.**

# *Aloha from Oahu*

**Submitted by the**
**Regional Support Center**
**Oahu, Hawaii**

Inside the unassuming brown building there is a constant hum of activity as members of the Regional SATCOM Support Center, Pacific, go about their daily mission—providing satellite communications support to military elements in the Pacific region.

By the year's end, members of the center expect to have supported more than 200 satellite communications missions—a milestone for this element of the U. S. Army Space Command.

"We provide system engineering and management of the tactical satellite communications allocations on the Defense Satellite Communications System and other DoD satellites," said Chuck Daigle, the RSSC-PAC chief.

"In plain English, that means we are the executive agents for the Commander in Chief of the Pacific region for the management and oversight of who gets on the satellites we use," he said.

"We work with the Defense Information Systems Agency, various other SATCOMS systems managers, and with the Army Space Command's 1st Satellite Control battalion companies in the region to ensure that those folks who have requested and have been approved for satellite communications, get them when and how they need them."

The work done at the center is a keystone in keeping all the military operations in the Pacific communicating smoothly. "We're getting busier," Daigle said. "Due to the wide distances involved in communicating across the Pacific region and the lack of terrestrial infrastructure in the pacific theater, communications users rely heavily on satellite communications resources."

Currently, the center is staffed with 10 people. Full staffing is 11, with six military and five civilians.

"The mission has grown in the last three years, and we have provided excellent support with no increase in personnel," Daigle said. "This has at times placed a work burden on the center since we have continued to provide both local and deployed support."

But some help is on the way in the near future, he said, when a compliment of six U.S. Air Force and six Navy personnel will come on board to support on-going and future efforts.

"As requirements continue to grow, there are additional efforts to provide some added satellite capacity in space," Daigle said. "One example is the near future launch of a new, modified DSCS satellite. This modification will help to alleviate some of the current constraints we presently have to live with."

Whether they are supporting Exercise Tandem Thrust, Ulchi Focus Lens or Cobra Gold, the satellite communications picture in the Pacific looks good for the immediate future, and even better in the out years, according to Daigle.